An anomalous developmental venous anomaly

Figure 1 MRI of cerebellar developmental venous anomaly

Axial T1 postgadolinium MRI shows a left cerebellar developmental venous anomaly (white arrows, A, B), the collecting vein of which is seen on T2 (C) and steady-state free precession (D) images (white arrows) adjacent to the left vestibular nerve (hashed arrows).

Developmental venous anomalies (DVA) are congenital variants of cerebral veins, found incidentally at autopsy in 2.6% of the population, which are most often asymptomatic.¹ Symptomatic compression of a cranial nerve by the collecting vein of a DVA is extremely rare, such as tinnitus from compression of the vestibulocochlear nerve.²

A 51-year-old man presented with 1 week of intermittent vertigo and mild left-sided dysmetria. Imaging showed contact of the left vestibular nerve by the collecting vein of a cerebellar DVA (figures 1 and 2). We speculate that the symptoms were caused by transient migration of the cisternal segment of the collecting vein. Management was conservative with spontaneous resolution.

Derek P. Narendra, MD, PhD, Nancy Wang, MD,* Michael G. Erkkinen, MD, Jayender Jagadeesan, PhD, Thomas C. Lee, MD, Eli E. Zimmerman, MD, Joshua P. Klein, MD, PhD*

*These authors contributed equally to this work.

From Brigham and Women's Hospital (D.P.N., N.W., M.G.E., J.J., T.C.L., E.E.Z., J.P.K.); Massachusetts General Hospital (D.P.N., N.W., M.G.E., E.E.Z.); and Harvard Medical School (D.P.N., N.W., M.G.E., J.J., T.C.L., E.E.Z., J.P.K.), Boston, MA.

Author contributions: Analysis and interpretation of data: Dr. Narendra, Dr. Wang, Dr. Erkkinen, Dr. Jagadeesan, Dr. Lee, Dr. Zimmerman, and Dr. Klein. Drafting of the manuscript: Dr. Narendra and Dr. Klein. Critical revision of the manuscript for important intellectual content: Dr. Narendra, Dr. Wang, Dr. Erkkinen, Dr. Jagadeesan, Dr. Zimmerman, and Dr. Klein.

Acknowledgement: The authors thank Dr. Mark R. Etherton, Dr. Taha Gholipour, and Matthew W. Rondeau of the Department of Neurology, Brigham and Women's Hospital, for discussion of the case.

Study funding: No targeted funding reported.

Disclosure: The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures.

Correspondence to Dr. Klein: jpklein@partners.org

REFERENCES

1. Sarwar M, McCormick WF. Intracerebral venous angioma. *Arch Neurol* 1978;35:323–325.
2. Malinvaud M, Lecanu JB, Halimi P, Avan P, Bonfils P. Tinnitus, cerebellar developmental venous anomaly. *Arch Otolaryngol Head Neck Surg* 2006;132:550–553.

Figure 2 3D reconstruction of cerebellar developmental venous anomaly

3D reconstructed image shows the developmental venous anomaly and collecting vein (purple) and cranial nerves (yellow): trigeminal, black arrows; facial, white arrows; vestibulocochlear, hashed arrows.

Share Your Artistic Expressions in *Neurology* ‘Visions’

AAN members are urged to submit medically or scientifically related artistic images, such as photographs, photomicrographs, and paintings, to the “Visions” section of *Neurology*®. These images are creative in nature, rather than the medically instructive images published in the *NeuroImages* section. The image or series of up to six images may be black and white or color and must fit into one published journal page. Accompanying description should be 100 words or less; the title should be a maximum of 96 characters including spaces and punctuation.

Learn more at www.aan.com/view/Visions, or upload a Visions submission at submit.neurology.org.

Save These Dates for AAN CME Opportunities!

Mark these dates on your calendar for exciting continuing education conferences by the American Academy of Neurology. Learn more at AAN.com/conferences.

AAN Fall Conference

- October 31-November 2, 2014, Las Vegas, NV, The Cosmopolitan of Las Vegas

AAN Annual Meeting

- April 18-25, 2015, Washington, DC, Walter E. Washington Convention Center

Neurology®

An anomalous developmental venous anomaly
Derek P. Narendra, Nancy Wang, Michael G. Erkinen, et al.
Neurology 2014;83;1033-1034
DOI 10.1212/WNL.0000000000000772

This information is current as of September 8, 2014

Updated Information & Services

including high resolution figures, can be found at:
<http://n.neurology.org/content/83/11/1033.full>

References

This article cites 2 articles, 0 of which you can access for free at:
<http://n.neurology.org/content/83/11/1033.full#ref-list-1>

Permissions & Licensing

Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:
http://www.neurology.org/about/about_the_journal#permissions

Reprints

Information about ordering reprints can be found online:
<http://n.neurology.org/subscribers/advertise>

Neurology® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright © 2014 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.